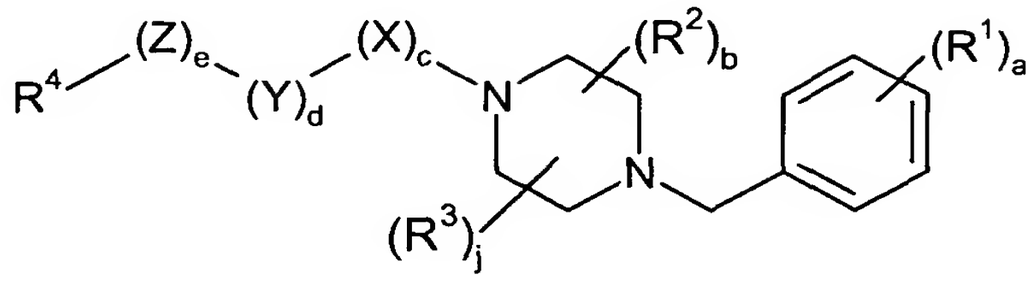
CLAIMS

1. A compound of the formula



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or the pharmaceutically acceptable salt thereof; wherein

a is 1, 2, 3, 4 or 5;

b is 0, 1, 2, 3 or 4;

c is 0 or 1;

d is 1, 2, 3, 4 or 5;

e is 0 or 1;

j is 1, 2, 3, or 4;

X is C(O), C(S) or CH_2;

Y is CH_2, or if e is 0, Y is CHR^8 wherein R^8 is hydrogen, (C_6-C_{10})aryl or NR^9R^{10};

Z is oxygen, NR^9 or $CR^{11}R^{12}$;

each R^1 is independently selected from hydrogen, hydroxy, hydroxysulfonyl, halo, (C_1-C_6)alkyl, mercapto, mercapto(C_1-C_6)alkyl, (C_1-C_6)alkylthio, (C_1-C_6)alkylsulfinyl, (C_1-C_6)alkylsufonyl, (C_1-C_6)alkylthio(C_1-C_6)alkyl, (C_1-C_6)alkylsulfinyl(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonyl(C_1-C_6)alkyl, (C_1-C_6)alkoxy, (C_6-C_{10})aryloxy, halo(C_1-C_6)alkyl, trifluoromethyl, formyl, formyl(C_1-C_6)alkyl, nitro, nitroso, cyano, (C_6-C_{10})aryl(C_1-C_6)alkoxy, halo(C_1-C_6)alkoxy, trifluoromethoxy, (C_3-C_7)cycloalkyl, (C_3-C_7)cycloalkyl(C_1-C_6)alkyl, hydroxy(C_3-C_7)cycloalkyl(C_1-C_6)alkyl, (C_3-C_7)cycloalkylamino, (C_3-C_7)cycloalkylamino(C_1-C_6)alkyl, ((C_3-C_7)cycloalkyl)((C_1-C_6)alkyl)amino, ((C_3-C_7)cycloalkyl(C_1-C_6)alkyl)amino(C_1-C_6)alkyl, cyano(C_1-C_6)alkyl, (C_2-C_7)alkenyl, (C_2-C_7)alkynyl, (C_6-C_{10})aryl, (C_6-C_{10})aryl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_2-C_6)alkenyl, hydroxy(C_1-C_6)alkyl, hydroxy(C_6-C_{10})aryl(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkylthio(C_1-C_6)alkyl, hydroxy(C_2-C_6)alkenyl, hydroxy(C_2-C_6)alkynyl, (C_1-C_6)alkoxy(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_6-C_{10})aryl(C_1-C_6)alkyl, (C_6-C_{10})aryloxy(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkoxy(C_1-C_6)alkyl, amino, (C_1-C_6)alkylamino, ((C_1-C_6)alkyl)$_2$amino, (C_6-C_{10})arylamino, (C_6-C_{10})aryl(C_1-C_6)alkylamino, amino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_6-C_{10})arylamino(C_1-C_6)alkyl, (C_6-C_{10})aryl (C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_1-C_6)alkylcarbonylamino, ((C_1-C_6)alkylcarbonyl)((C_1-C_6)alkyl)amino, (C_1-

C_6)alkylcarbonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkylcarbonyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino, (C_1-C_6)alkoxycarbonyl)(C_1-C_6)alkylamino, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbnony)((C_1-C_6)alkyl)amino(C_1-C_6)alkyl, carboxy, (C_1-C_6)alkoxycarbonyl, (C_6-C_{10})aryl(C_1-C_6)alkoxycarbonyl, (C_1-C_6)alkylcarbonyl, (C_1-C_6)alkylcarbonyl(C_1-C_6)alkyl, (C_6-C_{10})arylcarbonyl, (C_6-C_{10})arylcarbonyl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkylcarbonyl, (C_6-C_{10})aryl(C_1-C_6)alkycarbonyl(C_1-C_6)alkyl, carboxy(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonyl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkoxycarbonyl(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_1-C_6)alkylcarbonyloxy(C_1-C_6)alkyl, aminocarbonyl, (C_1-C_6)alkylaminocarbonyl, ((C_1-C_6)alkyl)$_2$aminocarbonyl, (C_6-C_{10})arylaminocarbonyl, (C_6-C_{10})aryl(C_1-C_6)alkylaminocarbonyl, aminocarbonyl(C_1-C_6)alkyl, (C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminocarbonyl(C_1-C_6)alkyl, (C_6-C_{10})arylaminocarbonyl(C_1-C_6)alkyl, (C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkyl, amidino, guanidino, ureido, (C_1-C_6)alkylureido, ((C_1-C_6)alkyl)$_2$ureido, ureido(C_1-C_6)alkyl, (C_1-C_6)alkylureido(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyl, (C_2-C_9)heteroaryl, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkyl and (C_2-C_9)heteroaryl(C_1-C_6)alkyl;

each R^2 and R^3 are independently selected from oxo, halo, (C_1-C_6)alkyl, (C_3-C_8)cycloalkyl, (C_3-C_8)cycloalkyl(C_1-C_6)alkyl, (C_3-C_8)cycloalkylamino(C_1-C_6)alkyl, (C_3-C_8)cycloalkyl(C_1-C_6)alkylamino(C_1-C_6)alkyl, halo(C_1-C_6)alkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl, (C_6-C_{10})aryl, (C_6-C_{10})aryl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_2-C_6)alkenyl, H-C(O)-, H-C(O)-(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkyl, hydroxy(C_2-C_6)alkenyl, hydroxy(C_2-C_6)alkynyl, hydroxy(C_6-C_{10})aryl(C_1-C_6)alkyl, hydroxy(C_3-C_8)cycloalkyl(C_1-C_6)alkyl, thio(C_1-C_6)alkyl, cyano(C_1-C_6)alkyl, halo(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_6-C_{10})aryl(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_1-C_6)alkyl, (C_6-C_{10})aryloxy(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkoxy(C_1-C_6)alkyl, (C_1-C_6)alkylthio(C_1-C_6)alkyl, (C_1-C_6)alkylsulfinyl(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonyl(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkylthio(C_1-C_6)alkyl, amino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkyl, (C_6-C_{10})arylamino(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, azido(C_1-C_6)alkyl, aminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonyl(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_6-C_{10})aryloxy(C_1-C_6)alkylcarbonyloxy(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_1-C_6)alkylcarbonyloxy(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkoxy(C_1-C_6)alkylcarbonyloxy(C_1-

C_6)alkyl, (C_1-C_6)alkylcarbonyl, (C_1-C_6)alkylcarbonyl(C_1-C_6)alkyl, carboxy, (C_1-C_6)alkoxycarbonyl, (C_6-C_{10})aryl(C_1-C_6)alkoxycarbonyl, (C_6-C_{10})aryl(C_1-C_6)alkylcarbonyl, aminocarbonyl, (C_1-C_6)alkylaminocarbonyl, ((C_1-C_6)alkyl)$_2$aminocarbonyl, (C_6-C_{10})arylaminocarbonyl, (C_6-C_{10})aryl(C_1-C_6)alkylaminocarbonyl, carboxy(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonyl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkoxycarbonyl(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkyl, (C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminocarbonyl(C_1-C_6)alkyl, (C_6-C_{10})arylaminocarbonyl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkyl, (C_6-C_{10})arylsulfonyl, (C_2-C_9)heterocycloalkyl, (C_2-C_9)heteroaryl, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkyl, (C_2-C_9)heteroaryl(C_1-C_6)alkyl or $R^{14}R^{15}N$(C_1-C_6)alkyl wherein R^{14} and R^{15} are each independently (C_1-C_6)alkyl or (C_1-C_6)alkylcarbonyl;

R^4 is $(R^5)_f(R^6)_g$(C_6-C_{10})aryl, $(R^5)_f(R^6)_g$(C_3-C_{10})cycloalkyl, $(R^5)_f(R^7)_h$(C_2-C_9)heteroaryl, or $(R^5)_f(R^7)_h$(C_2-C_9)heterocycloalkyl,

wherein f is 1, 2, 3 or 4;

g and h are each independently 0, 1, 2 or 3;

R^5 is one to three groups independently selected from (C_2-C_9)heterocycloalkylcarbonyl, (C_2-C_9)heteroarylcarbonyl, (C_2-C_9)heteroaryl(C_1-C_6)alkylaminocarbonyl, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylaminocarbonyl, ureido(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylureido(C_1-C_6)alkylaminocarbonyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylaminocarbonyl, halo(C_1-C_6)alkylaminocarbonyl, aminosulfonyl(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylaminosulfonyl(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylcarbonylamino, cyanoguanidino(C_1-C_6)alkylcarbonylamino, (C_1-C_6)alkylcyanoguanidino(C_1-C_6)alkylcarbonylamino, ((C_1-C_6)alkyl)$_2$cyanoguanidino(C_1-C_6)alkylcarbonylamino, aminocarbonyl(C_1-C_6)alkylcarbonylamino, (C_2-C_9)heteroaryl(C_1-C_6)alkylcarbonylamino, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylcarbonylamino, aminosulfonyl(C_1-C_6)alkylcarbonylamino, hydroxy(C_1-C_6)alkylureido, amino(C_1-C_6)alkylureido, (C_1-C_6)alkylamino(C_1-C_6)alkylureido, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylureido, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylureido, (C_2-C_9)heteroaryl(C_1-C_6)alkylureido, aminosulfonyl(C_1-C_6)alkylureido, aminocarbonyl(C_1-C_6)alkylureido, (C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkylureido, ((C_1-C_6)alkyl)$_2$aminocarbonyl(C_1-C_6)alkylureido, acetylamino(C_1-C_6)alkylureido, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylureido, halo(C_1-C_6)alkylsulfonylamino, amino(C_1-C_6)alkylsulfonylamino, (C_1-

C_6)alkylamino(C_1-C_6)alkylsulfonylamino, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylsulfonylamino, acetylamino(C_1-C_6)alkylsulfonylamino, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylsulfonylamino, ureido(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkylureido(C_1-C_6)alkylsulfonylamino, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylsulfonylamino, cyanoguanidino(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkylcyanoguanidino(C_1-C_6)alkylsulfonylamino, ((C_1-C_6)alkyl)$_2$cyanoguanidino(C_1-C_6)alkylsulfonylamino, aminocarbonyl(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylsulfonylamino, aminosulfonylamino, (C_1-C_6)alkylaminosulfonylamino, ((C_1-C_6)alkyl)$_2$aminosulfonylamino, aminocarbonyl(C_1-C_6)alkylamino(C_1-C_6)alkylsulfonylamino, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylsulfonylamino, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylsulfonylamino, cyanoguanidino, (C_1-C_6)alkylcyanoguanidino, ((C_1-C_6)alkyl)$_2$cyanoguanidino, (C_2-C_9)heterocycloalkylcyanoguanidino, (C_2-C_9)heteroarylcyanoguanidino, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylcyanoguanidino, (C_2-C_9)heteroaryl(C_1-C_6)alkylcyanoguanidino, amino(C_1-C_6)alkylcyanoguanidino, (C_1-C_6)alkylamino(C_1-C_6)alkylcyanoguanidino, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylcyanoguanidino, aminocarbonyl(C_1-C_6)alkylcyanoguanidino, (C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkylcyanoguanidino, ((C_1-C_6)alkyl)$_2$aminocarbonyl(C_1-C_6)alkylcyanoguanidino, aminocarbonyl(C_1-C_6)alkylamino, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylamino, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylamino, aminosulfonyl(C_1-C_6)alkylamino, (C_2-C_9)heteroaryl(C_1-C_6)alkylamino, acetylamino(C_1-C_6)alkylamino, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylamino, (C_1-C_6)alkoxycarbonyl(C_1-C_6)alkylamino(C_1-C_6)alkyl, cyano(C_1-C_6)alkylaminoalkyl, aminocarbonyl(C_1-C_6)alkylamino(C_1-C_6)alkyl, acetylamino(C_1-C_6)alkylamino(C_1-C_6)alkyl, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylamino(C_1-C_6)alkyl, cyanoguanidino(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_1-C_6)alkylcyanoguanidino(C_1-C_6)alkylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$cyanoguanidino(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylamino(C_1-C_6)alkyl, ureido(C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_1-C_6)alkylureido(C_1-C_6)alkylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylamino(C_1-C_6)alkyl, aminocarbonyloxy(C_1-C_6)alkylamino(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylaminocarbonyl(C_1-

C_6)alkylcarbonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminocarbonyl(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, aminosulfonyl(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkylcarbonylamino(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, cyanoguanidino(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, cyano(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, amino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylcarbonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heteroaryl(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, ureido(C_1-C_6)alkylureido(C_1-C_6)alkyl, (C_1-C_6)alkylureido(C_1-C_6)alkylureido(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylureido(C_1-C_6)alkyl, cyanoguanidino(C_1-C_6)alkylureido(C_1-C_6)alkyl, halo(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, amino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, acetylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ureido(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylureido(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, cyanoguanidino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$(cyanoguanidino)(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, aminosulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylaminosulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminosulfonylamino(C_1-C_6)alkyl, cyanoguanidino(C_1-C_6)alkyl, (C_1-

C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$(cyanoguanidino)(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyl(cyanoguanidino)(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyl(cyanoguanidino)amino, (C_2-C_9)heteroaryl(cyanoguanidino)(C_1-C_6)alkyl, (C_2-C_9)heteroaryl(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, amino(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, (C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminocarbonyl(C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkyl, aminosulfonyl, (C_1-C_6)alkylaminosulfonyl, ((C_1-C_6)alkyl)$_2$aminosulfonyl, (C_2-C_9)heterocycloalkylsulfonyl, amino(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkylamino(C_1-C_6)alkylaminosulfonyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heteroarylaminosulfonyl, hydroxy(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkoxy(C_1-C_6)alkylaminosulfonyl, ureido(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkylureido(C_1-C_6)alkylaminosulfonyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylaminosulfonyl, aminocarbonyl(C_1-C_6)alkylaminosulfonyl, cyanoguanidino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heteroaryl(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heterocycloalkylaminosulfonyl, R^6 is one to three groups independently selected from hydrogen, hydroxy, hydroxysulfonyl, halo, (C_1-C_6)alkyl, mercapto, mercapto(C_1-C_6)alkyl, (C_1-C_6)alkylthio, (C_1-C_6)alkylsulfinyl, (C_1-C_6)alkylsulfonyl, (C_6-C_{10})arylsulfonyl, (C_1-C_6)alkylthio(C_1-C_6)alkyl, (C_1-C_6)alkylsulfinyl(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonyl(C_1-C_6)alkyl, (C_1-C_6)alkoxy, hydroxy(C_1-C_6)alkoxy, (C_6-C_{10})aryloxy, halo(C_1-C_6)alkyl, trifluoro(C_1-C_6)alkyl, formyl, formyl(C_1-C_6)alkyl, nitro, nitroso, cyano, (C_6-C_{10})aryl(C_1-C_6)alkoxy, halo(C_1-C_6)alkoxy, trifluoro(C_1-C_6)alkoxy, amino(C_1-C_6)alkoxy, (C_3-C_{10})cycloalkyl, (C_3-C_{10})cycloalkyl(C_1-C_6)alkyl, hydroxy(C_3-C_{10})cycloalkyl(C_1-C_6)alkyl, (C_3-C_{10})cycloalkylamino, (C_3-C_{10})cycloalkylamino(C_1-C_6)alkyl, cyano(C_1-C_6)alkyl, (C_2-C_6)alkenyl, (C_2-C_6)alkynyl, (C_6-C_{10})aryl, (C_6-C_{10})aryl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_2-C_6)alkenyl, hydroxy(C_1-C_6)alkyl, (hydroxy) (C_6-C_{10})aryl(C_1-C_6)alkyl, ((C_1-C_6)alkylamino)(C_6-C_{10})aryl(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkylthio(C_1-C_6)alkyl, hydroxy(C_2-C_6)alkenyl, hydroxy(C_2-C_6)alkenyl, hydroxy(C_2-C_6)alkynyl, (C_1-C_6)alkoxy(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_6-C_{10})aryl(C_1-C_6)alkyl, aryloxy(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkoxy(C_1-C_6)alkyl, amino, (C_1-C_6)alkylamino,

$((C_1\text{-}C_6)alkyl)_2amino$, $(C_6\text{-}C_{10})arylamino$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylamino$, $amino(C_1\text{-}C_6)alkylamino$, $(C_2\text{-}C_9)heterocycloalkylamino$, $(C_2\text{-}C_9)heteroarylamino$, $(C_3\text{-}C_{10})cycloalkyl(C_1\text{-}C_6)alkyl)amino$, $(C_1\text{-}C_6)alkylcarbonylamino$, $(C_1\text{-}C_6)alkoxycarbonylamino$, $(C_2\text{-}C_6)alkenylcarbonylamino$, $(C_3\text{-}C_{10})cycloalkylcarbonylamino$, $(C_6\text{-}C_{10})arylcarbonylamino$, $(C_2\text{-}C_9)heterocycloalkylcarbonylamino$, $halo(C_1\text{-}C_6)alkylcarbonylamino$, $(C_1\text{-}C_6)alkoxy(C_1\text{-}C_6)alkylcarbonylamino$, $(C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkylcarbonylamino$, $((C_1\text{-}C_6)alkylcarbonyl)((C_1\text{-}C_6)alkyl)amino$, $((C_1\text{-}C_6)alkoxycarbonyl)((C_1\text{-}C_6)alkyl)amino$, $(C_1\text{-}C_6)alkylsulfonylamino$, $amino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylamino(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkyl)_2amino(C_1\text{-}C_6)alkyl$, $hydroxy(C_1\text{-}C_6)alkylamino(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylamino(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylamino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylcarbonylamino(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylcarbonylamino(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkylcarbonyl)((C_1\text{-}C_6)alkyl)amino(C_1\text{-}C_6)alkyl$, $C_3\text{-}C_{10})cycloalkyl(C_1\text{-}C_6)alkyl)amino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkoxycarbonylamino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkylcarbonylamino(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkoxycarbonyl)((C_1\text{-}C_6)alkyl)amino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylsulfonylamino(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkylsulfonyl)((C_1\text{-}C_6)alkyl)amino(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylsulfonylamino(C_1\text{-}C_6)alkyl$, $((C_6\text{-}C_{10})arylsulfonyl)((C_1\text{-}C_6)alkyl)amino(C_1\text{-}C_6)alkyl$, $(C_2\text{-}C_9)heterocycloalkylamino(C_1\text{-}C_6)alkyl$, $(C_2\text{-}C_9)heteroarylamino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkoxycarbonyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkoxycarbonyl$, $(C_1\text{-}C_6)alkylcarbonyl$, $(C_6\text{-}C_{10})arylcarbonyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylcarbonyl$, $hydroxy(C_1\text{-}C_6)alkoxycarbonyl$, $(C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkoxy(C_1\text{-}C_6)alkylcarbonyloxy(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkyl)_2aminocarbonyloxy(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylcarbonyl(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylcarbonyl(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylcarbonyl(C_1\text{-}C_6)alkyl$, aminocarbonyl, $(C_1\text{-}C_6)alkylaminocarbonyl$, $((C_1\text{-}C_6)alkyl)_2aminocarbonyl$, $(C_6\text{-}C_{10})arylaminocarbonyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylaminocarbonyl$, $(aminocarbonyl(C_1\text{-}C_6)alkylaminocarbonyl$, $((C_1\text{-}C_6)alkylaminocarbonyl(C_1\text{-}C_6)alkylaminocarbonyl$, $((C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkylaminocarbonyl$, $(amino(C_1\text{-}C_6)alkyl)aminocarbonyl$, $(hydroxy(C_1\text{-}C_6)alkylaminocarbonyl$, $aminocarbonyl(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylaminocarbonyl(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkyl)_2aminocarbonyl(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylaminocarbonyl(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylaminocarbonyl(C_1\text{-}C_6)alkyl$, amidino, hydroxyamidino, guanidino, ureido, $(C_1\text{-}C_6)alkylureido$, $(C_6\text{-}C_{10})arylureido$, $((C_6\text{-}C_{10})aryl)_2ureido$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylureido$, $halo(C_1\text{-}C_6)alkylureido$, $((C_1\text{-}C_6)alkyl)((C_6\text{-}C_{10})aryl)ureido$,

$((C_1\text{-}C_6)alkyl)_2ureido$, $halo(C_1\text{-}C_6)alkylcarbonylureido$, $ureido(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylureido(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkyl)_2ureido(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylureido(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})aryl)_2ureido(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylureido(C_1\text{-}C_6)alkyl$, $halo(C_1\text{-}C_6)alkylureido(C_1\text{-}C_6)alkyl$, $(halo(C_1\text{-}C_6)alkyl)((C_1\text{-}C_6)alkyl)ureido(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkyl)ureido(C_1\text{-}C_6)alkyl$, glycinamido, $(C_1\text{-}C_6)alkylglycinamido$, aminocarbonylglycinamido, $(C_1\text{-}C_6)alkoxy(C_1\text{-}C_6)alkylcarbonylglycinamido$, $(aminocarbonyl)((C_1\text{-}C_6)alkyl)glycinamido$, $((C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkylcarbonyl)((C_1\text{-}C_6)alkyl)glycinamido$, $((C_1\text{-}C_6)alkoxycarbonylamino(C_1\text{-}C_6)alkylcarbonyl)glycinamido$, $(C_6\text{-}C_{10})arylcarbonylglycinamido$, $((C_6\text{-}C_{10})arylcarbonyl)((C_1\text{-}C_6)alkyl)glycinamido$, $((C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylaminocarbonyl)glycinamido$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylaminocarbonyl)((C_1\text{-}C_6)alkyl)glycinamido$, $(C_6\text{-}C_{10})arylaminocarbonylglycinamido$, $((C_6\text{-}C_{10})arylaminocarbonyl)((C_1\text{-}C_6)alkyl)glycinamido$, $glycinamido(C_1\text{-}C_6)alkyl$, alaninamido, $(C_1\text{-}C_6)alkylalaninamido$, $alaninamido(C_1\text{-}C_6)alkyl$, $(C_2\text{-}C_9)heteroaryl$, $(C_2\text{-}C_9)heterocycloalkyl$, $(C_2\text{-}C_9)heteroaryl(C_1\text{-}C_6)alkyl$ and $(C_2\text{-}C_9)heterocycloalkyl(C_1\text{-}C_6)alkyl$;

R^7 is one to three groups independently selected from hydrogen, hydroxy, halo, $(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylsulfonyl$, $(C_6\text{-}C_{10})arylsulfonyl$, $(C_1\text{-}C_6)alkoxy$, $hydroxy(C_1\text{-}C_6)alkoxy$, $halo(C_1\text{-}C_6)alkyl$, fomyl, nitro, cyano, $halo(C_1\text{-}C_6)alkoxy$, $(C_2\text{-}C_6)alkenyl$, $(C_2\text{-}C_6)alkynyl$, $(C_6\text{-}C_{10})aryl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkyl$, amino, $(C_1\text{-}C_6)alkylamino$, $((C_1\text{-}C_6)alkyl)_2amino$, $(C_6\text{-}C_{10})arylamino$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylamino$, $(C_1\text{-}C_6)alkylcarbonylamino$, $(C_1\text{-}C_6)alkoxycarbonylamino$, $(C_2\text{-}C_6)alkenylcarbonylamino$, cycloalkylcarbonylamino, $(C_6\text{-}C_{10})arylcarbonylamino$, $halo(C_1\text{-}C_6)alkylcarbonylamino$, $(C_1\text{-}C_6)alkoxy(C_1\text{-}C_6)alkylcarbonylamino$, $(C_1\text{-}C_6)alkoxycarbonyl(C_1\text{-}C_6)alkylcarbonylamino$, $((C_1\text{-}C_6)alkylcarbonyl)((C_1\text{-}C_6)alkyl)amino$, $((C_1\text{-}C_6)alkoxycarbonyl)((C_1\text{-}C_6)alkyl)amino$, $(C_1\text{-}C_6)alkylsulfonylamino$, $amino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylamino(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkyl)_2amino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylcarbonylamino(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylcarbonylamino(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkylcarbonyl)((C_1\text{-}C_6)alkyl)amino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkoxycarbonylamino(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkoxycarbonyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkoxycarbonyl$, $(C_1\text{-}C_6)alkylcarbonyl$, $(C_6\text{-}C_{10})arylcarbonyl$, $(C_6\text{-}C_{10})aryl(C_1\text{-}C_6)alkylcarbonyl$, aminocarbonyl, $(C_1\text{-}C_6)alkylaminocarbonyl$, $((C_1\text{-}C_6)alkyl)_2aminocarbonyl$, $(C_6\text{-}C_{10})arylaminocarbonyl$, $aminocarbonyl(C_1\text{-}C_6)alkyl$, $(C_1\text{-}C_6)alkylaminocarbonyl(C_1\text{-}C_6)alkyl$, $((C_1\text{-}C_6)alkyl)_2aminocarbonyl(C_1\text{-}C_6)alkyl$, $(C_6\text{-}C_{10})arylaminocarbonyl(C_1\text{-}$

C_6)alkyl, guanidino, ureido, (C_1-C_6)alkylureido, ureido(C_1-C_6)alkyl, (C_1-C_6)alkylureido(C_1-C_6)alkyl, and glycinamido;

R^9 and R^{10} are each independently selected from the group consisting of hydrogen, (C_1-C_6)alkyl, (C_6-C_{10})aryl, (C_6-C_{10})aryl(C_1-C_6)alkyl, (C_1-C_6)alkylcarbonyl, (C_1-C_6)alkylcarbonyl(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkylcarbonyl, (C_6-C_{10})aryl(C_1-C_6)alkylcarbonyl(C_1-C_6)alkyl, aminocarbonyl, (C_1-C_6)alkylaminocarbonyl, ((C_1-C_6)alkyl)$_2$aminocarbonyl and (C_1-C_6)alkoxycarbonyl; and

R^{11} and R^{12} are each independently selected from the group consisting of hydrogen, (C_1-C_6)alkyl, (C_6-C_{10})aryl, (C_6-C_{10})aryl(C_1-C_6)alkyl, hydroxy, (C_1-C_6)alkoxy, hydroxy(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_1-C_6)alkyl, amino, (C_1-C_6)alkylamino, ((C_1-C_6)alkyl)$_2$amino, (C_1-C_6)alkylcarbonylamino, (C_3-C_8)cycloalkylcarbonylamino, (C_3-C_8)cycloalkyl(C_1-C_6)alkylcarbonylamino, (C_1-C_6)alkoxycarbonylamino, (C_1-C_6)alkylsulfonylamino, (C_6-C_{10})arylcarbonylamino, (C_1-C_6)alkoxycarbonyl(C_1-C_6)alkylcarbonylamino, (C_6-C_{10})aryl(C_1-C_6)alkylcarbonylamino, ((C_6-C_{10})aryl(C_1-C_6)alkylcarbonyl)((C_1-C_6)alkyl)amino, (C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, (C_3-C_8)cycloalkylcarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkylcarbonylamino(C_1-C_6)alkyl, (C_6-C_{10})aryl(C_1-C_6)alkylcarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heteroarylcarbonylamino(C_1-C_6)alkyl, (C_6-C_{10})arylsulfonylamino, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, aminocarbonylamino, (C_1-C_6)alkylaminocarbonylamino, halo(C_1-C_6)alkylaminocarbonylamino, ((C_1-C_6)alkyl)$_2$aminocarbonylamino, aminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminocarbonylamino(C_1-C_6)alkyl, halo(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, amino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkyl, carboxy(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonyl(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkyl and (C_1-C_6)alkylaminocarbonyl(C_1-C_6)alkyl.

2. A compound according to claim 1, wherein R^1 is hydrogen, halo, cyano, nitro, trifluoromethyl, trifluoromethoxy, (C_1-C_6)alkyl, hydroxy or (C_1-C_6)alkylcarbonyloxy.

3. A compound according to claim 1, wherein R^2 and R^3 are each independently selected from (C_1-C_6)alkyl, (C_3-C_8)cycloalkyl, amino(C_1-C_6)alkyl, amino(C_3-C_8)cycloalkyl, (C_1-C_6)alkylamino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_3-C_8)cycloalkyl, hydroxy(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkyl, ureido(C_1-

C_6)alkyl, (C_1-C_6)alkyureido(C_1-C_6)alkyl, (C_2-C_9)heteroaryl(C_1-C_6)alkyl or (C_2-C_9)heterocycloalkyl(C_1-C_6)alkyl.

4. A compound according to claim 1, wherein c is 1; X is C(O) of CH_2; d is 2; Y is ethylene; and e is 0.

5. A compound according to claim 1, wherein c is 1; X is C(O) or CH_2; d is 1or 2; Y is CH_2 or ethylene; e is 1; and Z is oxygen or NR^9 wherein R^9 is hydrogen or (C_1-C_6)alkyl.

6. A compound according to claim 1, wherein c is 1; X is C(O) or CH_2; d is 1; Y is CHR^8 wherein R^8 is NR^9R^{10}; R^9 and R^{10} are each independently hydrogen, (C_1-C_6)alkyl or (C_1-C_6)alkylcarbonyl; e is 1; and Z is selected from the group consisting of oxygen, $CR^{11}R^{12}$ wherein R^{11} and R^{12} are hydrogen, and NR^9 wherein R^9 is hydrogen or (C_1-C_6)alkyl.

7. A compound according to claim 1, wherein R^4 is $(R^5)_f(R^6)_g(C_6$-$C_{10})$aryl or $(R^5)_f(R^7)_h(C_2$-$C_9)$heteroaryl wherein f, g and h are independently 1 or 2.

8. A compound according to claim 1, wherein R^5 is selected from the group consisting of (C_2-C_9)heterocycloalkylcarbonyl, (C_2-C_9)heteroarylcarbonyl, (C_2-C_9)heteroaryl(C_1-C_6)alkylaminocarbonyl, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylaminocarbonyl, ureido(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylureido(C_1-C_6)alkylaminocarbonyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylaminocarbonyl, aminosulfonyl(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylaminosulfonyl(C_1-C_6)alkylaminocarbonyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylcarbonylamino, cyanoguanidino(C_1-C_6)alkylcarbonylamino, (C_1-C_6)alkylcyanoguanidino(C_1-C_6)alkylcarbonylamino, ((C_1-C_6)alkyl)$_2$cyanoguanidino(C_1-C_6)alkylcarbonylamino, aminocarbonyl(C_1-C_6)alkylcarbonylamino, (C_2-C_9)heteroaryl(C_1-C_6)alkylcarbonylamino, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylcarbonylamino, aminosulfonyl(C_1-C_6)alkylcarbonylamino, amino(C_1-C_6)alkylureido, (C_1-C_6)alkylamino(C_1-C_6)alkylureido, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylureido, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylureido, (C_2-C_9)heteroaryl(C_1-C_6)alkylureido, aminosulfonyl(C_1-C_6)alkylureido, aminocarbonyl(C_1-C_6)alkylureido, (C_1-

C_6)alkylaminocarbonyl(C_1-C_6)alkylureido, ((C_1-C_6)alkyl)$_2$aminocarbonyl(C_1-C_6)alkylureido, acetylamino(C_1-C_6)alkylureido, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylureido, amino(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkylamino(C_1-C_6)alkylsulfonylamino, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylsulfonylamino, acetylamino(C_1-C_6)alkylsulfonylamino, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylsulfonylamino, ureido(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkylureido(C_1-C_6)alkylsulfonylamino, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylsulfonylamino, cyanoguanidino(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkylcyanoguanidino(C_1-C_6)alkylsulfonylamino, ((C_1-C_6)alkyl)$_2$cyanoguanidino(C_1-C_6)alkylsulfonylamino, aminocarbonyl(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylsulfonylamino, aminosulfonylamino, (C_1-C_6)alkylaminosulfonylamino, ((C_1-C_6)alkyl)$_2$aminosulfonylamino, aminocarbonyl(C_1-C_6)alkylamino(C_1-C_6)alkylsulfonylamino, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylsulfonylamino, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylsulfonylamino, amino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkylaminocarbonyl amino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6) alkylcarbonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonyl amino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyloxycarbonyl amino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyl(C_1-C_6)alkylaminocarbony lamino(C_1-C_6)alkyl, (C_2-C_9)heteroaryl(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, ureido(C_1-C_6)alkylureido(C_1-C_6)alkyl, (C_1-C_6)alkylureido(C_1-C_6)alkylureido(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylureido(C_1-C_6)alkyl, cyanoguanidino(C_1-C_6)alkylureido(C_1-C_6)alkyl, amino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, acetylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (acetyl)((C_1-C_6)alkyl)amino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ureido(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylureido(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, cyanoguanidino(C_1-C_6)alkylsulfonylamino(C_1-

C_6)alkyl, (C_1-C_6)alkyl(cyanoguanidino)(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$(cyanoguanidino)(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, aminocarbonyl(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, aminosulfonylamino(C_1-C_6)alkyl, (C_1-C_6)alkylaminosulfonylamino(C_1-C_6)alkyl, ((C_1-C_6)alkyl)$_2$aminosulfonylamino(C_1-C_6)alkyl, (C_2-C_9)heterocycloalkylsulfonyl, amino(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkylamino(C_1-C_6)alkylaminosulfonyl, ((C_1-C_6)alkyl)$_2$amino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heteroarylaminosulfonyl, ureido(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkylureido(C_1-C_6)alkylaminosulfonyl, ((C_1-C_6)alkyl)$_2$ureido(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkylsulfonylamino(C_1-C_6)alkylaminosulfonyl, (C_1-C_6)alkoxycarbonylamino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heterocycloalkyloxycarbonylamino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heteroaryloxycarbonylamino(C_1-C_6)alkylaminosulfonyl, aminocarbonyl(C_1-C_6)alkylaminosulfonyl, cyanoguanidino(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heteroaryl(C_1-C_6)alkylaminosulfonyl, (C_2-C_9)heterocycloalkylaminosulfonyl halo(C_1-C_6)alkylaminocarbonyl, hydroxy(C_1-C_6)alkylureido, halo(C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkoxycarbonyl(C_1-C_6)alkylamino(C_1-C_6)alkyl, hydroxy(C_1-C_6)alkylaminocarbonylamino(C_1-C_6)alkyl, halo(C_1-C_6)alkylsulfonylamino(C_1-C_6)alkyl, aminosulfonyl, (C_1-C_6)alkylaminosulfonyl, ((C_1-C_6)alkyl)$_2$aminosulfonyl, hydroxy(C_1-C_6)alkylaminosulfonyl, and (C_1-C_6)alkoxy(C_1-C_6)alkylaminosulfonyl.

9. A compound according to claim 1, wherein R^6 and R^7 are each independently halo, halo(C_1-C_6)alkyl, (C_1-C_6)alkyl, (C_1-C_6)alkoxy, trifluoromethyl, trifluoromethoxy, hydroxy, aminocarbonyl, cyano, ureido, (C_1-C_6)alkylsulfonylamino, (C_1-C_6)alkoxycarbonylamino or glycinamino.

10. A pharmaceutical composition for treating or preventing a disorder or condition selected from autoimmune diseases, rheumatoid arthritis, type I diabetes (recent onset), lupus, inflammatory bowel disease, optic neuritis, psoriasis, multiple sclerosis, polymyalgia rheumatica, uveitis, and vasculitis, acute and chronic inflammatory conditions osteoarthritis, adult Respiratory Distress Syndrome, Respiratory Distress Syndrome of infancy, ischemia reperfusion injury,

glomerulonephritis, and chronic obstructive pulmonary disease (COPD) allergic conditions, asthma and atopic dermatitis, inflammation associated with infection, viral inflammation, influenza, hepatitis and Guillian-Barre, chronic bronchitis, chronic or acute tissue, cell, and solid organ transplant rejection, xeno-transplantation, atherosclerosis, restenosis, HIV infectivity (co-receptor usage), and granulomatous diseases, sarcoidosis, leprosy and tuberculosis, and sequelae associated with cancers, multiple myelomax; limiting the production of cytokines and/or TNF at inflammatory sites, as a consequence of decreasing cell infiltration; for treating diseases and/or congestive heart failure, linked to TNF and IL-1 and for treating pulmonary emphysema or dyspnea associated therewith, emphysema; HIV-1, HIV-2, HIV-3; cytomegalovirus (CMV), adenoviruses, Herpes viruses (*Herpes zoster* and *Herpes simplex*), for treating sequelae associated with infection where such infection induces production of detrimental inflammatory cytokines and/or TNF, fungal meningitis, joint tissue damage, hyperplasia, pannus formation and bone resorption, psoriatic arthritis, hepatic failure, bacterial meningitis, Kawasaki syndrome, myocardial infarction, acute liver failure, lyme disease, septic shock, cancer, trauma, and malaria, in a mammal, comprising an amount of a compound according to claim 1, or a pharmaceutically acceptable salt or pro-drug thereof, that is effective in treating or preventing such disorder or condition and a pharmaceutically acceptable carrier.

11. A pharmaceutical composition for treating or preventing a disorder or condition that can be treated or prevented by inhibiting chemokine binding to the receptor CCR1 in a mammal, comprising an amount of a compound according to claim 1, or a pharmaceutically acceptable salt thereof, effective in treating or preventing such disorder or condition and a pharmaceutically acceptable carrier.

12. A method for treating or preventing a disorder or condition selected from autoimmune diseases, rheumatoid arthritis, type I diabetes (recent onset), lupus, inflammatory bowel disease, optic neuritis, psoriasis, multiple sclerosis, polymyalgia rheumatica, uveitis, and vasculitis, acute and chronic inflammatory conditions osteoarthritis, adult Respiratory Distress Syndrome, Respiratory Distress Syndrome of infancy, ischemia reperfusion injury, glomerulonephritis, and chronic obstructive pulmonary disease (COPD) allergic conditions, asthma and atopic dermatitis, inflammation associated with infection, viral inflammation, influenza, hepatitis and

Guillian-Barre, chronic bronchitis, chronic or acute tissue, cell, and solid organ transplant rejection, xeno-transplantation, atherosclerosis, restenosis, HIV infectivity (co-receptor usage), and granulomatous diseases, sarcoidosis, leprosy and tuberculosis, and sequelae associated with cancers, multiple myelomax; limiting the production of cytokines and/or TNF at inflammatory sites, as a consequence of decreasing cell infiltration; for treating diseases and/or congestive heart failure, linked to TNF and IL-1 and for treating pulmonary emphysema or dyspnea associated therewith, emphysema; HIV-1, HIV-2, HIV-3; cytomegalovirus (CMV), adenoviruses, Herpes viruses (*Herpes zoster* and *Herpes simplex*), for treating sequelae associated with infection where such infection induces production of detrimental inflammatory cytokines and/or TNF, fungal meningitis, joint tissue damage, hyperplasia, pannus formation and bone resorption, psoriatic arthritis, hepatic failure, bacterial meningitis, Kawasaki syndrome, myocardial infarction, acute liver failure, lyme disease, septic shock, cancer, trauma, and malaria,in a mammal, comprising administering to a mammal in need of such treatment or prevention an amount of a compound according to claim 1, or a pharmaceutically acceptable salt or pro-drug thereof, that is effective in treating or preventing such disorder or condition.

13. A method for treating or preventing a disorder or condition that can be treated or prevented by antagonizing the CCR1 receptor in a mammal, comprising administering to a mammal in need of such treatment or prevention an amount of a compound according to claim 1, or a pharmaceutically acceptable salt thereof, that is effective in treating or preventing such disorder or condition.